Mr. Holmes picked the implement out of a bank, among hundreds of other pebbles which surrounded it, he was attracted by its resemblance to a palæolith. If I recall our conversation at the time correctly, Holmes stated that although he believed the quartz to be a natural form, it resembled somewhat such implements. Certainly, then, this discovery is entitled to due consideration, for although the implement has been condemned by some, has it not received the approval of others who are also authorities upon the subject, among them Professors Putnam, Wright, Wilson, and Dr. Abbott.

Palæoliths have been found in the Columbian gravels at Trenton by Dr. Abbott and his son, Richard Abbott, according to the labels attached to the specimens preserved at the Peabody Museum, and presented by these gentlemen to that institution.

Two other palæoliths have been found in the Wilmington gravels by different gentlemen and are now in the Peabody Museum, Harvard University, together with the letters accompanying them. It has been suggested that they have been found in a talus. Whether this be so or not remains to be determined. I, some time ago, called attention to the fact that the old aqueous deposits in the vicinity of Wilmington have evidently been subjected to considerable disturbance (see remarks on a "Fallen Forest and Peat Layer," Bull. of Geol. Soc. Am., Vol. II.), and it may be that this took place in times comparatively recent. In fact there is a probability that this may have been even after "the ancient talus" at Trenton was deposited. I am predisposed to this opinion from the fact that during the extraction of clay from the pits at Richmond's brickyard (mouth of Naaman's Creek) leaves of oak and sycamore trees were found beneath the brick clays of Lewis, and in other portions of these excavations the more ancient and recent gravels were intermingled together among the fallen forest layers.

Implements have been found in the brick-clays just mentioned, and these are at the Peabody Museum with the records of the donors attached.

Looking over the list of finds in supposed tertiary and post-tertiary deposits, it appears that some class all of these as neolithic implements, that is, judging by the character of the implements themselves. May it not be queried, is the neolithic classification of European countries applicable to certain finds on our western continent? for it seems that some of our ancient deposits contain the handiwork of neolithic man. The antiquity of certain deposits which seem to have yielded in the majority of cases implements claimed to be of neolithic type is a question for the geologist to decide, until then arguments upon this subject have but little weight. Still, as we said in the beginning of this article, they are interesting; and, we may add, allow all concerned to express their opinions.

LETTERS TO THE EDITOR.

*** Correspondents are requested to be as brief as possible. The writer's name is in all cases required as proof of good faith.*

On request in advance, one hundred copies of the number containing his communication will be furnished free to any correspondent.

The editor will be glad to publish any queries consonant with the character of the journal.

Natural Implements.

THERE are some things suggested by Dr. Brinton's recent article relating to early man in America, and three quotations may be made bearing on the subject of supposed primitive human art. It may be premised that no working archæologist has failed to find things of a puzzling character, those which he hesitates to retain as being of human workmanship, and yet which he is not altogether willing to cast aside. He accepts the fact, also, that many articles were so nearly fitted for man's use naturally that he often used them just as they were found.

An article, entitled "Observations on Stone-Chipping," by George E. Sellers of Illinois, prepared at Dr. Rau's request, was published in the Smithsonian Report for 1885, and is well worth reading. The various artificial processes are described, and some of the natural ones. He says: "The river-drift or gravel bars, when subjected to the grinding and crushing action of drift-logs or rolling bowlders, would furnish many suggestive forms and shapes that a little ingenuity would apply, and out of which would naturally grow the art of flaking. The streets of Paducah, Ky., are paved with partly rounded, angular, silicious gravel, mostly of jasper. Seeing heaps of this ready for spreading, I was struck by the many forms, mostly highly water-polished, that if found on a flaking ground would pass for refuse flakes and rubbish left by the workmen. On inquiry, I was informed that this coarse gravel was from banks on the Tennessee River, above the ordinary overflows. I selected many forms that any archæologist would pronounce to be the work of man."

He observed that a heavy wagon, driven over these, produced no effect on the surface gravel, but did on those lower down. "Many of the fresh fractures presented the form and appearance of genuine cores, and would be mistaken for the work of man." This led him to make an experiment by pressure, in a vessel. "On emptying the cylinder, the result was many representations of the rude implements found in the drift."

The second quotation is from a paper read by Dr. D. S. Kellogg of Plattsburgh, N. Y., at the New York meeting of the American Association for the Advancement of Science, in 1887, and entitled "Aboriginal Dwelling Sites in the Champlain Valley." "The material of which the chipped implements were made is found throughout this whole region. The so-called flint is abundant in the limestone of the locality. On Butler's Island in Lake Champlain detached pieces of the dark and striated flint, a foot or more in diameter, are so driven against each other by the action of the waves that their surfaces resemble the roughened surfaces of ordinary flint hammers."

The third quotation relates to the same lake, and will be found in the "Jesuit Relation" of 1668. The French had come within two miles of the Ticonderoga River. "Here we halted, without knowing why, until we observed our savages gathering from the shore pieces of flint, nearly all cut in shape." Then follows an Indian superstition connected with this customary gathering. "The occasion for this ridiculous story is the fact that the lake is often swept by severe storms, which cause high waves, particularly in the bay where Sieur Corlart, of whom we have spoken, perished, and when the wind comes from across the lake it casts upon the shore quantities of flint ready to strike fire."

There is one supposed trace of early man in New York that seems injudiciously used. Near the summit of the Lake Ridge, in the town of Gaines, was a spring, and in sinking a well on the spot traces of fire were found at the depth of eighteen feet. It is assumed that a fire was built on the beach when the lake was receding, and that it was buried in some way by the waters below it, under nearly twenty feet of soil. How this curious geological action was brought about is not explained. To produce such a deposit the waters should have risen above the fire, not fallen away from it. The probable solution might be that a fire was built in a ravine by a stream; that the ravine was filled in, turning the stream into a spring; and that other natural processes followed. That the lake could have buried the fireplace thus deep is clearly impossible. The depth by itself, however, is nothing very rare; but a field archæologist soon learns to distrust evidence of this nature. In some cases known to the writer, early villages and lodges, standing on open ground exposed to the wind, were buried in the sand, and the forest grew over them. The forest was cleared away all around, and the wind, with a wider sweep, carried the sand away again.

W. M. BEAUCHAMP.

Baldwinsville, Nov. 4.

Jealousy of a Dog.

IN an article in *Science* of Oct. 28, Mr. Stevenson remarks upon the jealousy of infants. Would you not place an infant of ten months upon a higher standard of development than a dog? Yet dogs are jealous. My brother owned one, a well-grown, bright fellow, who was usually upon excellent terms with my kitten but showed jealousy if the kitten was petted in his presence. On one occasion I held the kitten in my arms and pur-